

## P4650

## Epidemiological characterization of a population with MINOCA

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**Introduction:** Myocardial infarction with non-obstructive coronary arteries (MINOCA) accounts for 1–14% of all infarctions and represents an entity clinically defined by the presence of universal criteria for acute coronary syndrome, absence of obstructive coronary artery disease (OCD) ( $\geq 50\%$  stenosis), with no other obvious cause for the clinical presentation. The clinical characteristics and prognosis of these patients are not established.

**Purpose:** To evaluate the epidemiological and clinical characteristics of patients with MINOCA.

**Methods:** A descriptive unicentric cohort study, including consecutive patients admitted for myocardial infarction between November 2009 and December 2012, who underwent coronary angiography without evidence of OCD (without lesions  $> 50\%$ ). Demographic, clinical, electrocardiographic, echocardiographic, laboratory data, as well as the final diagnosis were collected.

**Results:** A total of 349 patients were included (50.7% men, mean age  $64 \pm 15$  years). The most prevalent cardiovascular risk factor was hypertension (73.6%,  $N=257$ ), followed by dyslipidemia (46.1%), smoking (27.8%) and diabetes mellitus (22.1%). At hospital admission, the majority (84%,  $N=223$ ) had chest pain, and was in Killip class I (87.1%). The electrocardiogram had ST segment elevation in 26% of patients. The mean ejection fraction evaluated was  $54 \pm 11.4\%$ , and 44% of the patients presented segmental contractility alterations. The mean values of troponin I and NT-proBNP were  $8.53 \text{ ng / L}$  and  $8897 \text{ pg / ml}$ , respectively. Angiographic non-significant coronary disease (1%  $< \text{lesions} < 50\%$ ) was found in 29.7% ( $N=103$ ) of the patients, with the anterior descending artery being the vessel most affected (45.8%). The mean duration of hospitalization was 8.22 days. In the majority of the cases, 65.3%, a specific etiological diagnosis was not assumed. The diagnosis of myocarditis was established in 11.2% of cases, in 8% of Tako-Tsubo cardiomyopathy, in 6.9% of endothelial dysfunction/microvascular disease, in 3.4% of cardioembolic infarction and 3.2% spasm coronary was the diagnosis. The mean follow-up time was  $4.3 \pm 2.1$  years, and it was verified that 9.2% ( $N=32$ ) had re-hospitalization for any cardiovascular cause. The overall mortality rate during the follow-up period was 17.5%.

**Conclusions:** This study demonstrates the experience of a tertiary center with MINOCAS, reinforcing the heterogeneity of this group, as well as difficulty in identifying a final diagnosis (in the majority of patients, from 2009 to 2012). Comprehensive etiological research is essential for therapeutic appropriateness.